

Figure 1. Amino Acid Sequences of Murine 1A6 and Human Consensus Sequences of Heavy Chain Subgroup III (HumIII) and Light Chain κ Subgroup I (Hum κ I).

V_H Domain

	1	11	21	31	41
Mouse1A6	EVQLQQSGAE	LVKPGASLKL	SCTASGFNIK	DTYIHWMKQR	PEQGLEW I GR
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HumIII	EVQLVESGGG	LVQPGGSLRL	SCAASGFNFS	-----WVRQA	PGKGLEWVA—
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	51 a	61	71	81 a bc	91
Mouse1A6	IDPANDNTIYD	PKVQGGATMT	ADTSS NTAYL	QLNSLTSEDTAVY	YCTT
		* * * *		* *	

HumIII	-----A	DSVKGRF	T IS	RDDSKNTAYL	QMNSLRAEDTAVY YCTT
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	103	111
Mouse1A6	SGYWFA	YWQGGLVT VSS

HumIII	-----	WGQGGLVT VSS
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V_L Domain

	1	11	21	31	41	51
Mouse1A6	DIVLTQSPAT	LSVTPGDSVS	LSCRASQSS	NNLHWYQQKH	SESPRLLIKH	ASQ
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Hum κ I	DIQMTQSPSS	LSASVGDRVT	ITC-----	-----	WYQQKP	GKAPKLLIY -- ----
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	61	71	81	91	101	
Mouse1A6	SISG I PS	RFSGSGSGTD	FTLSINSVET	EDFGMFFCQQ	SNSWPYTFGG	GTKLEIKR
	*	* * * *	* * *	*	*	

Hum κ I	---GVPS	RFSGSGSGTD	FTLTSSLQP	EDFATYYC ---	-----	FGQ	GTKVEIKR
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The CDR residues as defined by both Kabat and Chothia are shown in boldface.

Fig. 2A

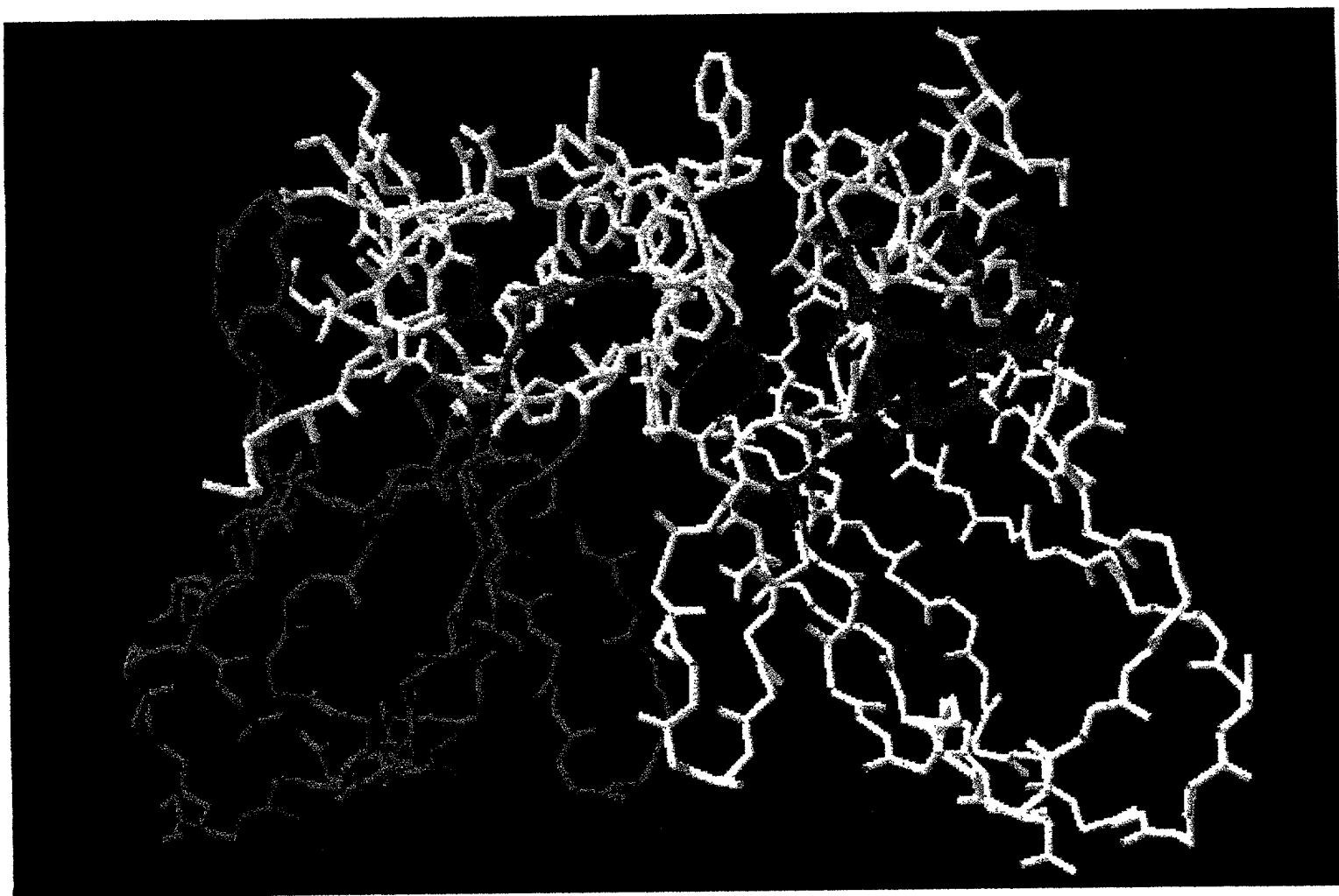


Fig. 2B

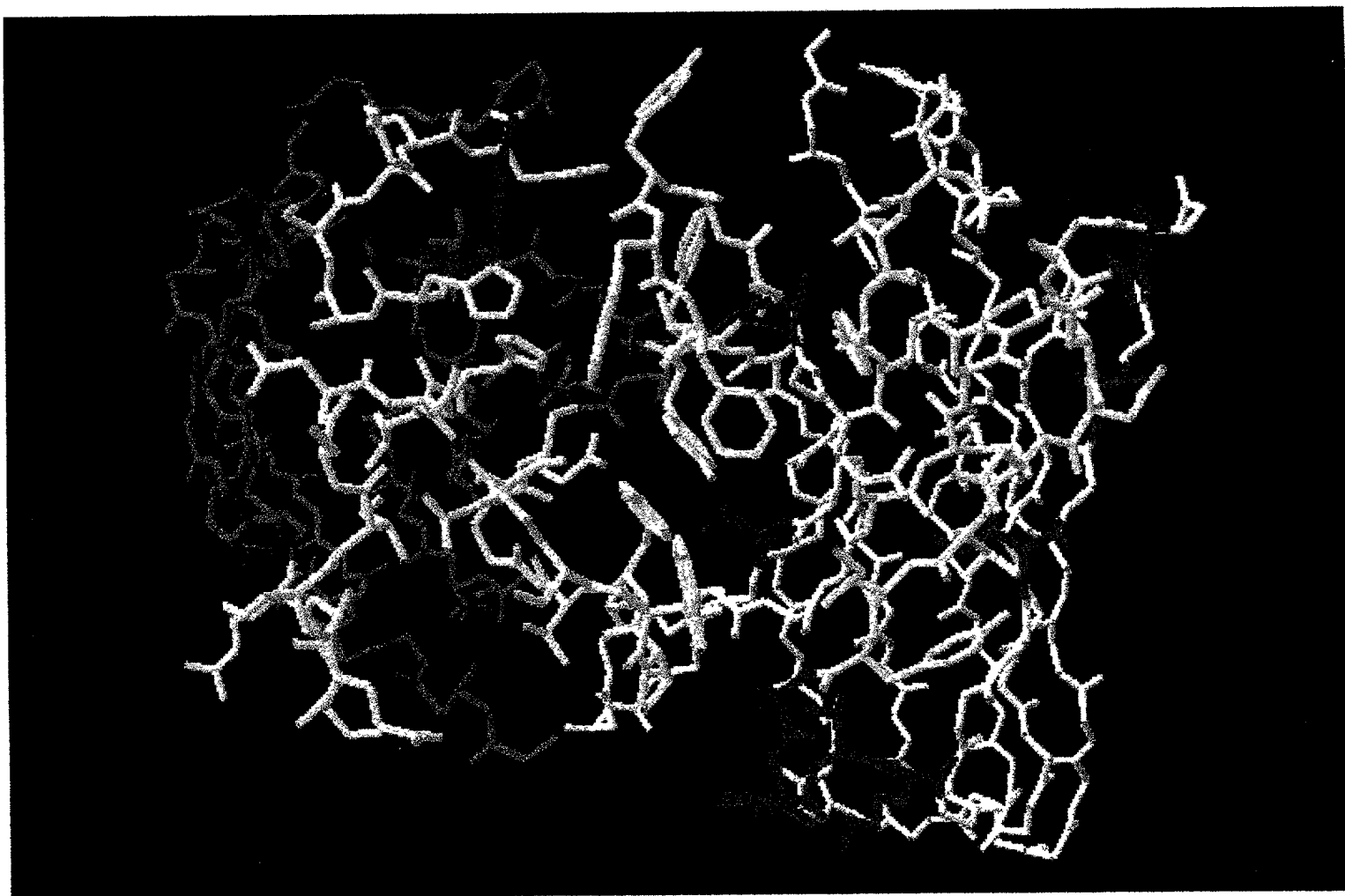
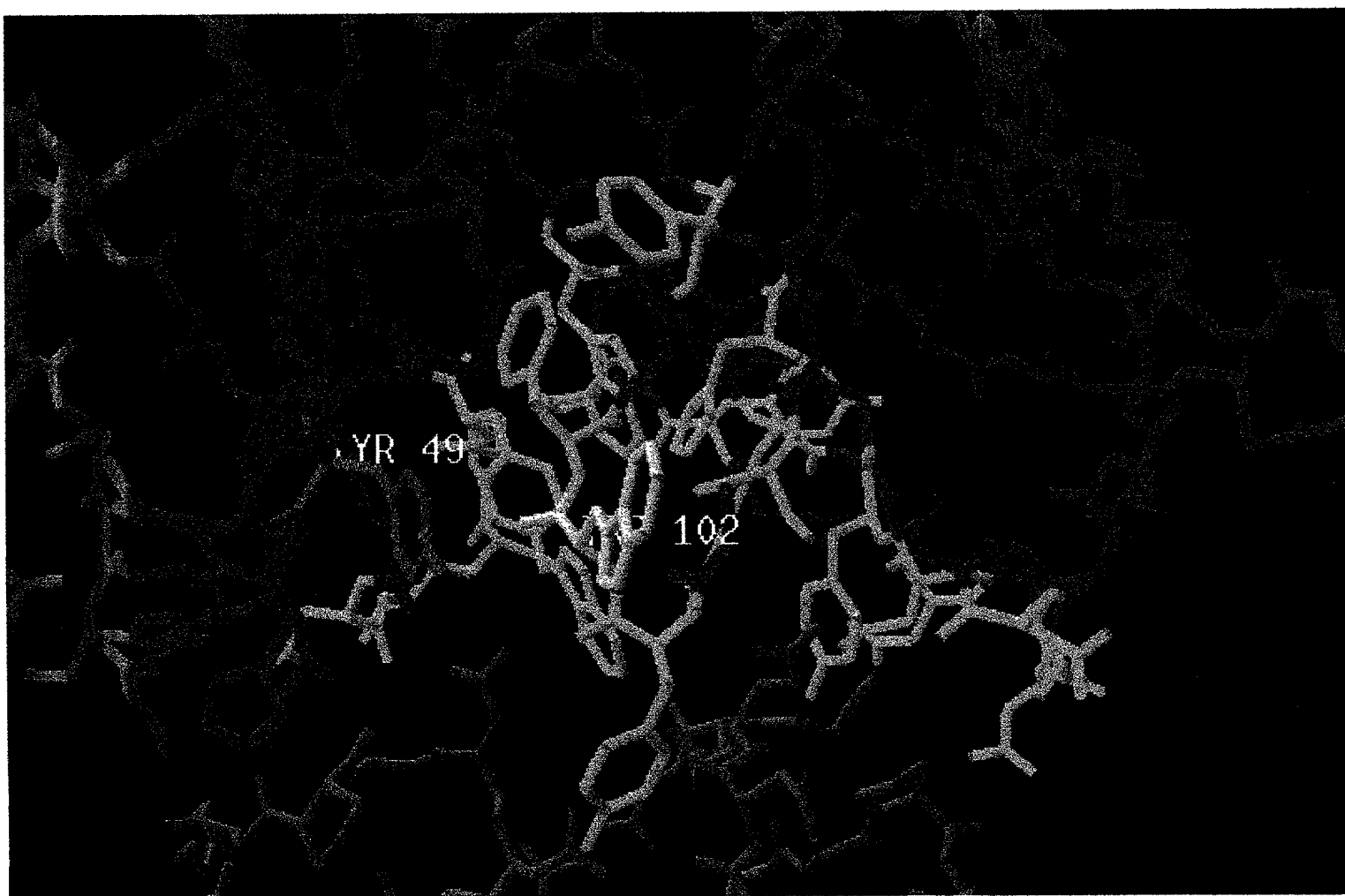


Fig. 2C



[illegible]

V_L Domain

The CDR residues as defined by both Kabat and Chothia are shown in boldface.

Figure 4. cDNA Sequences of Humanized scFv3 (Hum3) [SEQ ID. 2].

The restriction sites are underlined. CCATGG NCO I SITE; GGATCC BAMH I SITE; GTTAAC HPA I SITE

CGAACCATGGGCGATATCcgatgACCCAATCTCCGtctagcCTGAGCgccAG
TgttGGTgatCGAGTTaccattactTGCCGCGCCAGCCAATCTATCAGTAATAATCTTC
ACTGGTATCAACAAaaaccgggtaaagctCCGaaaCTTCTTATCAAACACGCCTCTCAG
AGCATTAGCGGCgttCCGAGCCGCTTCTCTGGCTCTGGCTCGGGCACGGACTTT
ACCCTTaccATCAGCTCTcttcagccgGAAGACtttGCCaccTATtatTGTCAGCAGTCTAA
TAGCTGGCCGTATACCTTCGGTcaaGGTACCAAGgtcGAGATTAAGCGCGGCGG
TGGCGGTTCTGGTGGCggtgtagcggtaggcGGTGGATCCGGTGGCGGTGGCAGCGA
AGTTCAACTTGTTGAGTCTGGTGGCGGTCTGGTTCAGCCGGGTGGCTCTCTGC
GCCTGTCTTGCGCAGCAAGCGGTTTCAACATTAAGGACACCTACATCCATTGG
atgAGGCAAGCTCCGGGTAAGGGTCTGGAGTGGGTGGCACGTATCGACCCGGC
AAACGACAACACCATTTACGATCCGAAGGTGCAGGGCCGTTTTACTatgTCTGC
GGACacCTCTAAGAACACCGCGTACCTTCAGATGAACTCTCTGCGTGCCGAGG
ACACCGCCGTCTACTACTGCACGACCTCTGGCTACTGGTTTGCCTACTGGGGC
CAGGGCACGCTTGTCACCGTCTCTTCTGGTtAaCCC

Figure 5. Protection of HRV15 infection by mouse 1A6 scFv (Ms1) and humanized 1A6 scFv proteins (Hs3, 4, 7, 17, 18, 19 and 21).

